

CLAIMS

What is claimed is:

1 1. A method comprising:
2 broadcasting a synchronization signal from a wireless
3 access point device indicating a mode of operation and
4 available network services; and
5 establishing a connection between a non-authorized mobile
6 device and the access point device.

1 2. The method of claim 1 further comprising:
2 wirelessly transmitting a synchronization signal to indicate a
3 mode of operation and available network services; receiving a
4 request for connection establishment from the non-authorized
5 mobile device;
6 receiving a request for access to a selected network
7 service, from among the available network services, from the
8 non-authorized mobile device; and
9 allowing the non-authorized mobile device access to the
10 selected network service.

1 3. The method of claim 1 wherein the available network
2 services includes free public network services.

1 4. The method of claim 1 wherein the available network
2 services includes pay-per-use public network services.

1 5. The method of claim 4 further comprising:
2 providing a form of payment for a pay-per-use network
3 service.

1 6. The method of claim 5 wherein the form of payment is a
2 credit card number.

1 7. The method of claim 5 wherein the form of payment is a
2 prepaid payment number.

1 8. The method of claim 5 further comprising:
2 providing a secure transmission of information between
3 the non-authorized mobile device and the access point device.

1 9. The method of claim 5 further comprising:
2 sending payment information from the non-authorized
3 mobile device to the access point device wirelessly.

1 10. The method of claim 5 further comprising:
2 validating the payment information provided by the non-
3 authorized mobile device; and
4 providing the validation results to the non-authorized
5 mobile device.

1 11. The method of claim 10 further comprising:
2 establishing a connection between the non-authorized
3 mobile device to a selected network service only if payment
4 validation successful.

1 12. The method of claim 11 further comprising:
2 disconnecting the non-authorized mobile device from a
3 selected network service, from among the available network
4 services, if payment expires.

1 13. The method of claim 1 further comprising:
2 performing data exchanges between the non-authorized
3 mobile device and a selected network service, from among the
4 available network services, through the access point.

1 14. The method of claim 1 further comprising:

2 disconnecting the non-authorized mobile device from the
3 access point device to terminate access to the available
4 network services.

1 15. The method of claim 1 wherein connection establishment
2 uses any authentication procedure performed in accordance with
3 the Electrical and Electronics Engineers (IEEE) Standard
4 802.11 Specification or its supplements.

1 16. A machine-readable medium having one or more instructions
2 for enabling a non-authorized user to wirelessly access a
3 number of network services, which when executed by a
4 processor, causes the processor to perform operations
5 comprising:

6 wirelessly transmitting a synchronization signal
7 indicating a mode of operation and available network services;

8 receiving a request for connection establishment from a
9 non-authorized user;

10 establishing a connection with the non-authorized user;

11 receiving a request for access to a selected network
12 service, from among the available network services, by the
13 non-authorized user; and

14 providing the non-authorized user access to the selected
15 network service.

1 17. The machine-readable medium of claim 16 further
2 comprising:

3 requesting a form of payment from the non-authorized user
4 for access to pay-per-use network services.

1 18. The machine-readable medium of claim 17 further
2 comprising:

3 validating the payment information provided by the non-
4 authorized user.

1 19. The method of claim 18 further comprising:
 2 disconnecting the non-authorized mobile device from the
 3 selected network service if payment expires.

1 20. The method of claim 16 further comprising:
 2 performing data exchanges between the non-authorized user
 3 and the selected network service.

1 21. An apparatus comprising:
 2 a transceiver port for wirelessly communicating with
 3 mobile devices;
 4 a network communications port communicatively coupled to
 5 the transceiver port, the network communications port for
 6 coupling to a network; and
 7 a control unit coupled to the transceiver port and the
 8 network communications port, the control unit configured to
 9 control access from the transceiver port to the network
 10 communications port and provide at least two modes of
 11 operation, a first mode of operation to provide authorized
 12 mobile devices access to the network communications port, and
 13 a second mode of operation to provide non-authorized mobile
 14 devices access to the network communications port.

1 22. The apparatus of claim 21 wherein any one of the operation
 2 modes can be dynamically enabled or disabled.

1 23. The apparatus of claim 21 wherein in the first mode of
 2 operation a specific authentication process is requested from
 3 the mobile devices to obtain full network access over the
 4 network communications port and in the second mode of
 5 operation no specific authentication process is requested from
 6 the mobile devices to obtain certain network access over the
 7 network communications port.

1 24. The apparatus of claim 21 wherein the second mode of
2 operation allows the non-authorized mobile devices to obtain
3 public network access through the network communication port.

1 25. The apparatus of claim 21 wherein the control unit is
2 configured to provide secure services to both authorized and
3 non-authorized mobile devices.

1 26. The apparatus of claim 21 wherein the control unit is
2 configured to provide data exchange to both authorized and
3 non-authorized mobile devices in accordance with the
4 Electrical and Electronics Engineers (IEEE) 802.11 Standard.

1 27. The apparatus of claim 21 wherein the control unit is
2 configured to provide a third mode of operation, the third
3 mode of operation provides authorized mobile devices access to
4 the network communications port and non-authorized mobile
5 devices limited access to the network communications port
6 simultaneously.